NuMI Horn System Ground Fault

- System had been tripping for few days
- System=P.S. + striplines +horn1+horn2
- Friday eve many trips and EE check PS
- Saturday fault traced to striplines or horn
- The short was ~ 1.5 ohms to ground
- Sunday crane electronics installed and three shield blocks were pulled out above horn 2

NuMI Horn System

- Jim Hylen had seen a change in the fields of the horns which indicated horn 2
- A low pot showed the fault was in horn 2 or its stripline block (pix)
- The stripline block is steel with nickel plating on the inside which is flaking off
- Guess is that the nickel is causing the short by building up in the zig zag portion

NuMI Horn Status

- Camera work, more hi-potting, optical survey, visual inspection of horn1 block
- Wednesday horn and block should be in the hot cell and pulled apart. Then a hi-pot will confirm or refute our guess
- Yes:install spare stripline block(shield wall)
- No: Consider floating horn 2 with G10
- \sim 2 weeks for yes or no

NuMI Horn Time Estimates

- Several months to redo spare block with anodized aluminum
- 4 to 5 months to build new spare blockS with anodized aluminum
- 4 to 5 months for spare horn
- Spare target soon but present work interferes.